i. Executive Summary

Introduction and Overview

This report documents results of a series of Apprenticeship Forums held with national and local-level stakeholders in support of the Apprenticeship Impact Project (AIP). The purpose of the project was to conduct research and develop an initial blueprint for action (strategic action plan) for enhancing and expanding the role and impact of registered apprenticeship as a structured training program in the workforce investment system of the 21st century. The forums, co-sponsored by the Bureau of Apprenticeship and Training (BAT) and the National Association of State and Territorial Apprenticeship Directors (NASTAD), were used as a process for gathering input and ideas on how to strengthen registered apprenticeship in the new millennium.

Four, one and one-half day forums were held:

- National–national-level partners & stakeholders–Washington, D.C., January 25-27, 1999
- Southeast–local-level partners & stakeholders–Raleigh, NC, February 25-26, 1999
- Midwest–local-level partners & stakeholders–Chicago, IL, March 9-10, 1999
- Western– local-level partners & stakeholders– San Diego, CA, August 12-13, 1999

A total of 176 participants attended the four forums, with nine (9) speakers also participating in small group discussions. Input and ideas were solicited from 185 participants representing a cross-section of registered apprenticeship partners and stakeholders from business/industry, labor, education, community-based organizations, and government as illustrated below.

Forums; Evaluation & "Detailed Thoughts" Forms Participation Mix	National Forum	South-east Forum	Midwest Forum	Western Forum	Total All Forums	All Eval. Forms	All "Detail" Forms
Employers/Employer Org.	6	17	11	11	45	17	3
Labor Organizations	9	2	8	3	22	13	5
Labor/Management Org.	8	3	6	11	28	11	3
Education Org/Institutions	4	3	5	3	15	5	2
Community-Based Org.	0	2	3	6	11	6	1
BAT/Other Federal Gov't.	*20	5	4	3	32	25	0
SAC/Other State/Local Gov't.	6	2	4	10	22	21	2
Other or Unspecified	1	0	0	0	1	6	1
TOTAL PARTICIPANTS	**54**	**34**	**41**	**47**	**176**	**104**	**17**

Several federal, state & private sector speakers also participated in small group discussions: National (1); Southeast (4); Midwest (2); Western (2). "Detailed Thoughts" forms were only provided at the Southeast & Midwest forums for individuals to submit their specific ideas, on a voluntary basis. *Includes several military sponsors.

Small group discussion sessions of about 10 participants per group were held on both days of the forums as the primary vehicle for soliciting ideas and input on four core areas of inquiry:

- Expanding the use of registered apprenticeship
- Enhancing linkages and partnerships
- Expanding diversity (by increasing access to apprenticeship opportunities for women, minorities, youth)
- Enhancing the quality of apprenticeship training and the system

Most of the small group discussions were facilitated by NASTAD Executive Board members or staff, with some being facilitated by federal, state, or contractor staff. A structured guide was used by all to pose the same series of critical topics and questions to each group. For the Western Forum, the discussion guide was modified to focus on more targeted issues within the four core areas of inquiry. A plenary session was also used to solicit whole group feedback and reactions to selected findings from the previous three forums. All discussion guide questions were reviewed and approved by BAT/NASTAD.

Plenary sessions at all the forums included presentations on the Workforce Investment Act and One-Stop Delivery System, linkages with other workforce development programs such as School-to-Work and Job Corps, and various promising practices. These sessions were used to share information and develop an understanding of the Act and how the workforce development system is changing, exchange promising practices information and ideas, and as "food for thought" to spur discussion within the small groups.

This report provides complete, detailed findings, based on a thorough and objective qualitative analysis of all audio tapes of small group discussions, transcripts of plenary sessions, notes/flip charts, and "detailed thoughts" and evaluation forms, across all four forums. Every perspective, viewpoint, idea, or notion put forth by participants has been captured, analyzed, and organized in this report. This executive summary presents an overview of the input and ideas provided, and is organized as follows:

- Introduction and Overview (this section)
- Current Strengths to Build On
- Negative Images and Misconceptions
- Most Critical Challenges and Suggested Strategies
- Cross-cutting, Fundamental Roles
- Cross-cutting, Fundamental Research and Technical Assistance Needs
- Observations and Next Steps

Current Strengths to Build On

Forum discussions concerning what elements of registered apprenticeship make it successful and what components or measures are important quantitative or qualitative indicators of the quality of registered apprenticeship programs yielded the following.

Success Elements/Quality Components	Quality Outcome Indicators
Registration Standards & Credentials	Completion, Retention & Other Rates (Measures)
Curriculum Structure & Delivery	Well-Rounded Journeyworker as End Result
Earn While Learning Approach	Evaluation Mechanisms to Ensure Quality
Industry/Employer & Market Needs-Driven	Reputation of/Demand for Program & Graduates
Career Path with Progressive Wages	Cost-Effectiveness of the Program
Qualified, Trained & Dedicated Program Personnel	
Formal Commitments of All Key Players	
High Entry Standards	
Labor/Management Participation	
Flexibility of the System	

With the exception of a couple of items, these elements, components, and indicators, taken together, represent broad agreement among partners and stakeholders on what constitutes a quality program. They provide a:

- Foundation of current strengths to build on.

- Starting point for developing quality performance benchmarks.

- Basis for developing positive marketing messages.

Negative Images and Misconceptions

All small groups and most participants strongly suggested that overcoming negative images and misconceptions was vitally important to strengthening the registered apprenticeship system over the long run. The following lists the specific images or misconceptions described by participants as being widely held views among the public, employers not active in apprenticeship, and workers, in general. Changing these images forms a core, fundamental challenge for which various strategies were suggested by participants, as described in the next segment of this executive summary. The juxtaposition of this list with the positive success elements, components, and indicators presented previously, underscores the importance of mass marketing and public education efforts to expand the system, to develop linkages and partnerships, to attract diverse groups to apprenticeship, and to spur quality improvements.

Apprenticeship...	Participant Comments/Explanations
Leads to "Blue Collar" Jobs	• Low status jobs • Low paying jobs • Non-professional jobs • Dead-end jobs (no career advancement) • Jobs with little employment security • Image of "hard hats" or "grease monkeys" (associated with only jobs in construction or auto industry)
Is for "Dummies"	• For "special," non-academic, and/or non-achieving students who cannot make it in college & must pursue vocational education (vocational education & apprenticeship often viewed as the same) • For those who can't do anything else, there is always construction work
Is Exclusionary or Limiting	• Only union-based or union-controlled • Only for construction trades, therefore limited occupations available for training • "Good-ole-boy" system for older, white males or relatives; closed to "outsiders/others"
Is an Old-Fashioned, Out-of-Date System	• Associated with old, dying out or downsized, factory industries • Associated with manual labor that has since been replaced by technology • Associated with historical, indentured "servitude" employer-worker relationships
Is a Rigid, Government Controlled Program	• Too bureaucratic; too many regulations and administrative rules (employers don't like the government "telling them what to do") • Offers little flexibility to customize programs to fit employer needs • Benefits of registration do not outweigh the "hassles"
Requires too Much Paperwork, Time & Expense to Administer	• Training takes too long • Program requires too much paperwork • Costs too much to administer in relationship to benefits, especially for small employers training few apprentices

Provides Credentials that Are Not <u>Universally</u> Recognized	• Recognition depends on industry & state • Employer acceptance of certificate as indicative of journeyworker status not widespread, outside of building trades & auto industry • Credentials may or may not be in line with various individual state licensing requirements • Not viewed as "equal to a college degree" (a universally recognized credential)

Most Critical Challenges Facing the System

Sixteen (16) most critical challenges emerged from the small group discussions across the first three forums, as listed below. The number of groups (out of a total of 14 small groups) which raised the particular challenge is also noted. The four listed as cross-cutting represent fundamental issues that impact each of the areas of inquiry – expansion, linkages/partnerships, diversity, and quality. These 16 critical challenges were reviewed with the Western Forum participants during a plenary session, and the opening segment of the small group discussions. Western Forum discussions generally confirmed this list, although no group counts were feasible given the revised process. The few additional challenges suggested at the Western Forum fit within this broad construct, specifics of which have been incorporated in the body of this report.

Most Critical Challenges – Cross-Cutting	# of Groups
Overcoming Negative Images & Misconceptions	14 of 14 groups
Securing National Policy, Direction & Resources	11 of 14 groups
Increasing Consistency & Flexibility Within the System	7 of 14 groups
Maintaining Quality & Integrity of the Training Program	6 of 14 groups
Most Critical Challenges – Expansion	
Increasing Promotion & Education Efforts	14 of 14 groups
Recruiting Qualified Applicants	13 of 14 groups
Increasing Program Sponsorship, Especially Among New Industries & Employers	9 of 14 groups
Most Critical Challenges – Linkages	
Developing Useful Linkages & Partnerships	9 of 14 groups
Most Critical Challenges – Diversity	
Finding, Attracting & Retaining Qualified, Non-Traditional Recruits	3 of 14 groups
Addressing Social/Workplace Diversity Issues & Attitudes	3 of 14 groups
Most Critical Challenges – Quality	
Updating Training Standards, Curricula & Facilities	9 of 14 groups
Increasing Quality & Compliance Reviews	8 of 14 groups
Enhancing Staff/Instructor Training & Training Methods, Especially Technology-Based	6 of 14 groups
Streamlining Registration & Related Processes	6 of 14 groups
Improving Quality of Data & Efficiency of Information Dissemination	5 of 14 groups
Enhancing Recognition & Portability of Completion Certificate	3 of 14 groups

The following five-page table summarizes the strategies/action items suggested across all four forums to

address these challenges.

Summary of Critical Challenges & Suggested Strategies/Action Items

Most Critical Challenges Cross-Cutting	Strategies/Action Items Cross-Cutting
Overcoming Negative Images & Misconceptions (14 of 14) • Securing National Policy, Direction & Resources (11 of 14) • Increasing Consistency & Flexibility within the System (7 of 14) • Maintaining Quality & Integrity of the Training Program (6 of 14)	Develop a national, mass communications campaign to change image of & attitudes toward the skilled trades & apprenticeship as a career training/educational vehicle • Change "old" or "confusing" terminology to help address image problems • Have top-level, national/regional summits to focus attention on skilled worker shortages/economic impact & how apprenticeship can address this national need • Provide federal, strategic direction to lead apprenticeship into the 21st century < Apprenticeship & Workforce Investment Act (mixed views among participants as to why/how to link with other programs) < National industrial policy < Other, general policy-related suggestions • Develop creative funding and system-wide resource leveraging strategies < Determine if/how Workforce Investment Act funding can be used by apprenticeship < Leverage funds from other government programs with mutual interests (e.g., needs-based grants; target group grants) < Leverage One-Stops as marketing resources < Develop collaborative resource sharing < Use CBOs as a "collaborative grants broker" < Seek foundation or other funding sources • Explore use of tax credits, targeted grants & other financial incentives (to spur system changes) • Revisit federal-state roles, staffing & related organizational structures • Increase consistency of federal-state policies & implementation practices • Develop & use industry-driven, uniform, national, competency-based skill/training standards for each trade/occupation • Find ways to increase flexibility without sacrificing quality/integrity • Develop federal grievance procedure for state denials • Expand rural opportunities – provide more assistance • Foster continuous exchanges of promising practices

Most Critical Challenges Expansion	Strategies/Action Items Expansion

• Increasing Promotion & Education Efforts (14 of 14)	• Increase applicant marketing & education efforts, and provide generic materials for all to use, focusing on K-12 youth, especially middle schools, and aggressive targeting of women & minorities
• Recruiting Qualified Applicants (13 of 14)	• Increase sponsor marketing & education efforts, and provide generic materials for all to use, especially focusing on employer/industry association & employer-to-employer approaches
• Increasing Program Sponsorship, Especially Among New Industries & Employers (9 of 14)	• Explore use of employer financial incentives (e.g., tax credits, target group or needs-based grants)

	• Expand useful linkages & partnerships as a way to recruit applicants, leverage applicant marketing resources, or encourage sponsorship
	  < Education system – top priority for most participants (applicants)
	  < Job Corps system – provides a natural/existing linkage to build upon (applicants)
	  < One-Stops – general marketing (applicants)
	  < Job developers – all programs have these staff (applicants)
	  < Community/technical colleges – college drop-outs or graduates with no careers (applicants)
	  < Non-traditional partnerships in apprenticeship community (sponsors)
	  < Other federal/state agencies such as military outplacement programs, prisons, or transportation (sponsors)
	  < New industry associations & less active unions such as Teamsters (sponsors)

	• Increase consistency, flexibility & customization to attract new sponsors & better facilitate multi-state/nationwide programs
	• Clarify/streamline process for registering new programs in new occupations (e.g., eliminate multiple review/approval steps, use Internet to speed up)
	• Pro-actively identify new apprenticeable occupations & develop programs, but where business/industry need exists & for high growth, good wage occupations – specific suggestions involved primarily information technology, medical, and environmental occupations
	• Strengthen use of mandated government contract set-asides
	• Develop more pre-apprenticeship programs to create a pool of qualified applicants, or extend length of training; expand pre-apprenticeships on large scale basis as direct entry/direct feeder system linked to specific apprenticeship programs • Use waivers, relax entry standards, or change screening processes to increase applicant pools
	• Offer more incentives to apprentices (e.g., sign-on and progress bonuses, college scholarships, tools/equipment)

Most Critical Challenges Linkages/Partnerships	Strategies/Action Items Linkages/Partnerships
• Developing <u>Useful</u> Linkages & Partnerships (9 of 14)	• Develop strategy for leveraging Workforce Investment Act/One-Stop Service Delivery System < Leverage Workforce Investment Act funds, where appropriate & mutual interests exist (e.g., youth pre-apprenticeship programs, support services such as child care or transportation, ITA usage) < Provide appropriate marketing & education materials to One-Stops < Encourage system-wide WIB membership among apprenticeship sponsors (labor/employer reps.) < Mandate partnerships at state level (via Governor executive orders) < Train One-Stop staff on apprenticeship < Engage One-Stops in providing counseling, career assessment & screening for apprenticeship < Station ATRs or liaisons at One-Stop Centers • Develop strategic & systemic partnerships with K-12 school systems as primary/direct feeder system by focusing on high level policy changes (e.g., adding apprenticeship enrollment measurements to "school report cards;" incorporating apprenticeship awareness into teacher preparation curricula; instituting "real" pre-apprenticeship curricula offerings directly linked to specific apprenticeship programs), in addition to educating and increasing awareness among educators; use STW vehicle, where STW is working well • Develop partnerships with <u>selected</u> workforce development programs as feeder systems where there is a reasonable match between populations served and qualifications for apprenticeship < JC – most useful as it naturally complements apprenticeship as a direct entry/pre-apprenticeship vehicle & is great source for women, minority & youth recruits < WtW – possibly useful as vehicle for non-traditional recruits; apprenticeship would raise wage levels < OSY – possibly useful, but "they are hard to find" < DW – least useful as they are unlikely to "want to start over at entry-level wages" • To develop linkages with programs serving persons with disabilities, must first identify apprenticeship trades where the disabled may work (e.g., physical requirements of the occupation) • Find ways to strengthen <u>selected</u> partnerships within the registered apprenticeship community < JATCs & CBOs (i.e., CBOs as referral sources, pre-apprenticeship or basic skill training providers, support resources for non-traditional groups) < Union & non-union employers/industries (i.e., to address differing viewpoints on strengthening apprenticeship) < Industry groups & small employers (i.e., to consolidate individual smaller programs, reduce duplication, leverage group resources & increase consistency) < Sponsors & post-secondary schools (i.e., for applicant recruitment source, related instruction provision, sharing resources, academic credit/enhancement of apprenticeship credentials, bi-lingual assistance) < With other government agencies (i.e., to expand sponsorships) • Develop linkages with economic development groups/agencies

Most Critical Challenges Diversity	Strategies/Action Items Diversity

• Finding, Attracting & Retaining Qualified, Non-Traditional Recruits (3 of 14)
 	
• Addressing Social/Workplace Diversity Issues & Attitudes (3 of 14)
 	
(Note: Western Forum focused more attention on this area of inquiry for which all five groups had much to offer. However, exact group counts could not be added due to differences in discussion guide used.)
	• Implement regulatory, policy, or enforcement changes or actions
	  < Revise/update or eliminate 29 CFR 30 (times have changed; make consistent with EE
	  < Increase enforcement of & compliance with EEO/AA
	  < Use waivers or change selection procedures to facilitate direct entry of non-traditio
	  < Relax entry standards (e.g., HS/GED diploma or testing requirements)
	  < Mandate and/or increase percentages or goals for both applicants and acceptance
	  < Make federal-state requirements/goals the same
	  < Allow granting of credit for trade work experience in lieu of or to supplement test s
	
	Note: Other than participants indicating the regulatory changes listed above, most advo
	increase diversity in the apprenticeship workforce; marketing, pre-apprenticeships, and
	mechanisms.
	
	• Develop more pre-apprenticeship programs directly linked to specific apprenticeship pro
	
	• Offer targeted tax credits or other incentives to employers
	
	• Develop/expand aggressive, targeted marketing/education efforts specific to various et
	gender-sensitive materials & career exploration programs; especially use & showcase
	models & success stories
	
	• Develop more apprenticeship programs in non-traditional occupations
	
	• Build stronger linkages with CBOs, JC, and other government agencies or organization
	outreach, screening, basic skill training, support services)
	  < Share information & promising practices
	  < Attend each other's conferences
	  < Develop collaborative resource leveraging through CBOs as "grant brokers"
	  < Provide direct grants, apprenticeship awareness training & other resources to CBO
	    groups & the apprenticeship trades to enhance their outreach, pre-apprenticeship t
	    performance-based contracting/payment rules to allow for "apprenticeship placeme
	  < Expand referral sources such as JC, DOL/Women's Bureau, minority small busines
	    WtW programs, HUD public housing programs, One-Stops, minority churches, civil r
	
	• Foster workplace diversity training, policies, support systems & other pro-active steps a
	& life skills training to apprenticeship curricula; find ways to accommodate child care & t
	a diverse workforce a quality indicator
	
	• Develop linkages with colleges to provide bi-lingual assistance (e.g., materials, interpre
	
	• Work with school systems/insurance industry to buy bulk employer liability insurance to
	
	• Address gender bias in standardized aptitude tests used by apprenticeship programs t

Most Critical Challenges Quality	Strategies/Action Items Quality

• Updating Training Standards, Curricula & Facilities (9 of 14)	• Review/update current training standards/curricula, facilities
	   ‹ Drop, add or update list of apprenticeable occupations
	   ‹ Update work processes, training/skill standards, curricula & facilities
	   ‹ Move toward competency-based skill standards linked to time
	   ‹ Provide sponsors with a standard job/task analysis model/process to speed up registration
	   ‹ Require comprehensive job/task analyses to support curricula development
	   ‹ Make updating part of quality review checklist

• Increasing Quality & Compliance Reviews (8 of 14)	• Increase quality control/compliance efforts & program/sponsor self-evaluations; focus on quality outcomes, not paper/file reviews
• Enhancing Staff/Instructor Training & Training Methods, Especially Technology-Based Methods (6 of 14)	• Improve applicant selection process to increase completion rates (e.g., use GATB, TABE, Workkeys, other)

• Streamlining Registration & Related Processes (6 of 14)	• Develop system-wide mechanisms to spur quality improvements
	   ‹ Quality program performance measurement, benchmarking, or program accreditation process
	   ‹ Quality awards program based on Malcolm Baldrige or other criteria
	   ‹ Incentive funding to support high quality programs (i.e., reward success)
	   ‹ Customer/stakeholder feedback surveys/focus groups (e.g., apprentice, sponsor, instructors)
	   ‹ ISO 9000 or other official certifications
	   ‹ Ensuring apprentice proficiency tests are administered at completion
	   ‹ Craft competitions (local, state, regional, national)
	   ‹ Standard evaluation tools for all sponsors to use in conducting internal reviews

• Improving Quality of Data & Efficiency of Information Dissemination (5 of 14)	• Increase employer involvement in development/implementation of their programs
• Enhancing Recognition & Portability of Completion Certificate (3 of 14)	• Provide more & continuous opportunities to exchange promising practices; develop ways to share curricula
	• Increase staff/instructor training (e.g., upgrade training & TOTs for OJT instructors, mentor training, related instruction teacher exposure to trades, training sponsors' on-site training coordinators, registration agency staff training); recognize & possibly certify journeyworker upgrade training programs
	• Encourage development and use of technology-based training delivery methods
	• Reduce paperwork/streamline registration & record-keeping processes (e.g., Internet, reduce # of approval levels)
	• Improve AIMS & record-keeping/reporting processes
	• Use Internet more to facilitate system-wide communication (e.g., for registration, marketing, posting regulations/policies, information on promising practices, work processes & training/skill standards, career exploration information, listing of sponsors/programs, listing of CBOs/others active in apprenticeship)

	• Develop certificate recognition & portability enhancements
	   ‹ Develop/use one set of truly national standards per occupation/trade
	   ‹ Expand range of certifications, e.g., advanced level for trade masters
	   ‹ Expand use of dual degree programs in conjunction with community colleges
	   ‹ Enhance correlation between apprenticeship credentials & state licensing requirements

Cross-cutting, Fundamental Roles

From strategy discussions, the following role definition parameters emerged as fundamental to

determining what actions each apprenticeship system partner should take in developing and implementing, system-wide strategic action plans. These parameters include the following:

- Participants generally understood and embraced the notion that all partners have a role to play in expanding and improving the system -- all must work in partnership, as the apprenticeship community, to set and achieve goals, and implement the changes needed. It is not just government's responsibility; it's everyone's responsibility.

- Participants generally were looking for BAT (as the federal partner) to provide leadership and direction (i.e., not through "mandates"or regulatory/policy changes, per se, but through establishing a broad "21st century" vision or strategy, and coordinating and influencing the apprenticeship community to participate and collaborate in defining priorities, developing plans, and implementing changes).

- Participants generally did not see a distinction between BAT/SAC roles – they both fulfill the government partner role within the apprenticeship community. As such, their roles should not be separated, suggesting that they need to work in concert as the government partner.

In addition to performing registration, quality oversight, and compliance functions, participants suggested that BAT/SAC, as the government partner, should enhance its role by further providing to the apprenticeship community and system:

- Vision and direction (e.g., facilitating and coordinating strategic action plans).

- Brokering of linkages and partnerships to leverage scarce funding, other resources, and collaborative efforts.

- Technical assistance and system-wide communications support (e.g., developing generic marketing and education materials all can use, enhancing use of the Internet and AIMS, sponsoring research from which all can benefit).

Participants also suggested that in light of the new Workforce Investment Act, the scarcity of apprenticeship resources, and changes that may result from these forums and the strategic action planning process, government roles may need to be revisited or clarified.

Participants generally saw sponsors, beyond ensuring that their programs are the best they can be, having a direct role in expanding and improving apprenticeship within their spheres of influence, including reaching out to further build linkages and partnerships. This would include,

for example, working with K-12 school systems to promote and educate youth and their intermediaries, offering incentives to attract apprentices, and encouraging new sponsorship through networking and employer-to-employer marketing and education.

Finally, participants saw a need for enhanced roles among community-based-organizations (CBOs) and educational institutions, both K-12 and post-secondary, in partnership with the apprenticeship community. In particular, they can help strengthen registered apprenticeship by helping school systems become better feeder systems, acting as referral sources, ensuring proper screening and preparation of recruits, and developing linkages to spur outreach and recruitment, for example. CBOs, can be particularly helpful in finding, attracting, and retaining qualified, women, minority, and youth recruits, and serving as a "grants broker" to leverage community resources. Also, community and technical colleges can be helpful in working with apprenticeship programs to provide related instruction, bi-lingual assistance, and recruitment sources, as well as to develop dual degree programs.

Cross-cutting, Fundamental Research and Technical Assistance Needs

Throughout the forums, some specific research needs were raised, and various strategies or action items suggested by participants will likely require research or related technical assistance (TA) tools to support their implementation. A full listing of such items is provided in section 3. In general, the research or TA tools suggested include these types of information or study needs:

- Generic marketing and education materials all can use.

- Hard, compelling cost-benefit statistics and demographic data for "benefits" selling of apprenticeship to potential employer-sponsors and apprentice-applicants, as well as intermediaries such as school systems (i.e., teachers, school boards, counselors, parents).

- Assessment of customer satisfaction (employers and apprentices) and stakeholder needs and wants. Is registered apprenticeship meeting their needs?

- Continuous documentation/distribution of promising practices.

- Comparative analyses of consistency and flexibility issues across federal and state-administered programs.

- Evaluation studies of demonstration projects or other promising practices such as school-to-registered apprenticeship programs, especially focusing on outcomes and cost-effectiveness issues.

- Follow-up studies of graduated apprentices to obtain more data on long-term success of the program.

Observations and Next Steps

For a variety of reasons, as noted or implied by participants, the time is right for planning and implementing system-wide changes that will strengthen the registered apprenticeship system for the new millennium. These include:

- *Skilled worker shortages* – Due to high employment, skilled worker shortages, in general, and, specifically in the skilled trade occupations, creates a national economic need (some say crisis). In many locations, business and industry, especially in construction and selected areas of manufacturing, the current primary users of apprenticeship training, cannot grow as rapidly as they might otherwise due to the shortage of journeyworkers. This economic need provides an opportunity to gain top-level, policy maker support for enhancing and expanding registered apprenticeship as the premiere training system to address these shortages.

- *Current workforce demographics* – With the largest entrants to the workforce being women and minorities, especially Hispanics, combined with the overall skilled worker shortages, a critical opportunity now exists for increasing diversity among the apprentice workforce.

- *Workforce Investment Act* – The new legislation, and state-level activities associated with its implementation, creates an opportunity to change the historical isolation that has often existed between registered apprenticeship and other workforce development programs. Mixed participant views emerged from the forums, however, concerning the extent of and ways in which linkages with other employment and training programs can benefit the apprenticeship system. Although difficult to ascertain at this point, the designation of registered apprenticeship training as a pre-qualified service provider will hopefully serve to better position the program within the family of education and training choices offered to Americans.

- *One-Stop Service Delivery System* – The new legislation establishes the One-Stop Service Delivery System as the focal point for the provision of publically-funded workforce development programs and services. With over 800 One-Stops currently in some form of operation, and more to be established, this system can provide registered apprenticeship with a viable, system-wide promotion and education vehicle for "getting the word out."

- *Willingness to work in partnership* – Partners and stakeholders who attended the forums demonstrated a willingness to work together to strengthen registered apprenticeship for the new millennium. They acknowledged that all partners in the system -- government, labor, industry, and education -- must work collaboratively if beneficial change is to occur.

In addition, buy-in and common ground emerged. Participants acknowledged the positive steps these forums have taken with regard to seeking their ideas and input, and in particular, providing this opportunity to the local level. Participants generally supported the need for a comprehensive examination of the current system, and the development of change plans to strengthen registered apprenticeship for the new millennium. Although more work must be done at subsequent forums or through other avenues to develop true consensus and specific action plans, broad agreement emerged on the 16 most critical challenges and several potential strategies or action items suggested to address one or more of these challenges. Most of the strategy suggestions do not involve regulatory change, except for addressing issues concerning 29 CFR 30. Participants also recognized that each partner must play a role in the change process – strengthening the system is everyone's business, not just that of the government. Participants, however, voiced concerns about whether the results of these forums will lead to needed change. Although recognizing that strengthening the system will take time and considerable effort, participants want to see concrete actions taken as quickly as possible.

The Apprenticeship Impact Project (AIP) envisioned next steps to involve achieving consensus-based decisions among major partners and stakeholders on:

- Which of the many challenges and strategies/action items suggested by forum participants should be the top priorities for meaningful, system-wide change (i.e., strategic vision and goals).

- How can key partners and stakeholders collaborate to develop strategic action plans (a "blueprint") to achieve the identified priorities.

- What roles each and every partner can and will take to implement the collaboratively-developed strategic action plans.

In addition to the results of these four forums, three research papers or reports have been prepared as input to the strategic action planning process. These papers include: a resource guide by NASTAD on "Promising Practices in Expanding Usage, Enhancing Linkages, Expanding Diversity, and Enhancing Quality;" a paper by Dr. Robert Glover, Glover & Associates, on "Past, Present, and Possible Future Directions in Registered Apprenticeship;" and a paper by Dr. Frank Bennici, Westat, Inc., on "Current and Potential Linkages Between Registered Apprenticeship and Dislocated Worker Programs."

Given the recent institution of the new Federal Committee on Registered Apprenticeship (FCRA), results of the Apprenticeship Impact Project forums and supporting research papers were presented to the members for their determination of next steps.